ALAMEDA COUNTY WATER DISTRICT

DIRECTORS
JUDY C. HUANG
President
ARTHUR LAMPERT
Vice President
JAMES G. GUNTHER
MARTIN L. KOLLER
JOHN H. WEED

43885 SOUTH GRIMMER BOULEVARD • P.O. BOX 5110, FREMONT, CALIFORNIA 94537-5110
(510) 668-4200 • FAX (510) 770-1793 • www.acwd.org

MANAGEMENT
PAUL PIRAINO
General Manager
ROBERT SHAVER
Engineering Manager
KARL B. STINSON
Operations Manager
WILBERT LIGH
Finance and Administration Manager

May 5, 2006

Ms. Kim Rosmaier
California Department of Water Resources
3251 S Street
Sacramento, CA 95816

Dear Ms Rosmaier:

Subject: 2006-2010 Urban Water Management Plan

The Alameda County Water District (ACWD) has recently amended our 2006-2010 Urban Water Management Plan (UWMP) to include additional information on (1) the projected number of future water accounts, and (2) projected future wastewater flows in five-year increments. Enclosed, please find the specific pages of the UWMP which have been amended. Also, enclosed is a copy of Resolution No. 06-030 of the ACWD Board of Directors adopting the amended Plan on April 27, 2006.

If you have any questions or comments, please contact Eric Cartwright at (510) 668-4206.

Sincerely,

Paul Piraino
General Manager

Enclosures

As per section 10621 (b) of the Urban Water Management Planning Act, all cities within the District's service area were notified of ACWD's UWMP planning process. The Cities of Fremont, Newark and Union City were notified, as was the County of Alameda.

1.3 PUBLIC REVIEW AND ADOPTION OF PLAN

Section 10642 of the Urban Water Management Planning Act requires urban water suppliers to make the Plan available for public review and hold a public hearing prior to adopting the Plan. The Draft Plan was distributed for review and comment beginning on October 27, 2005. In order to encourage the involvement of ACWD's customers, including both residential and non-residential customers, ACWD made copies of the Draft Plan available on the District's web-site, as well as provided copies for review at the District's headquarters and city libraries. Copies of the Draft Plan were also provided to the Cities of Newark, Union City and Fremont, as well as the San Francisco Public Utilities Commission, California Department of Water Resources and Union Sanitary District. A public hearing was also held on the Plan on November 10, 2005 and comments were received through December 15, 2005. This Plan was adopted on December 15, 2005 by ACWD Board of Directors Resolution No. 05-055.[1]

As per the requirements in Water Code Section 10644 (a) a copy of ACWD's Urban Water Management Plan was provided to the following agencies: the California Department of Water Resources, the California State Library, the City of Fremont, the City of Newark and Union City, California on or before January 15, 2006, within 30 days of the Plan's adoption.

ACWD will periodically review its Urban Water Management Plan to ensure that it accurately reflects the District's management activities. Changes will be adopted and incorporated into the plan via amendments or other appropriate means as set forth in Water Code sections 10640 through 10645.

1.4 REPORT FORMAT AND ORGANIZATION

This UWMP provides an update of the elements contained in the District's Integrated Resources Planning Study, and discusses the status of projects, programs, and studies in water supply planning, water conservation and recycled water that were recommended as part of the IRP. This Plan also meets the requirements of the Urban Water Management Planning Act. Table 1-3 provides an index of the required components of the UWMP, and their location within this ACWD 2006-2010 UWMP Update, respectively.

Chapter 1: Introduction - This chapter provides an overview of the Urban Water Management Planning Act requirements, the preparation and organization of this report, and background information on ACWD.

Chapter 2: Past, Current & Future Water Use - This chapter provides an overview of historical and current water use in the District, as well as a summary of future projected water demands.

Chapter 3: Sources of Supply - This chapter provides a summary of the District's sources of supply and their availability, as well as an overview of the management of these supplies.

Chapter 4: Groundwater - This chapter describes the Niles Cone Groundwater Basin, the District's reliance on it as a source of water supply, and the District's policy and activities for managing it.

Chapter 5: Desalination – This chapter describes the Newark Desalination Facility and the District's plans for expanding capacity to augment this source of water supply.

Chapter 6: Water Recycling - This chapter describes the Union Sanitary District's wastewater system (which serves the ACWD service area), and the opportunities for the use of recycled.

---

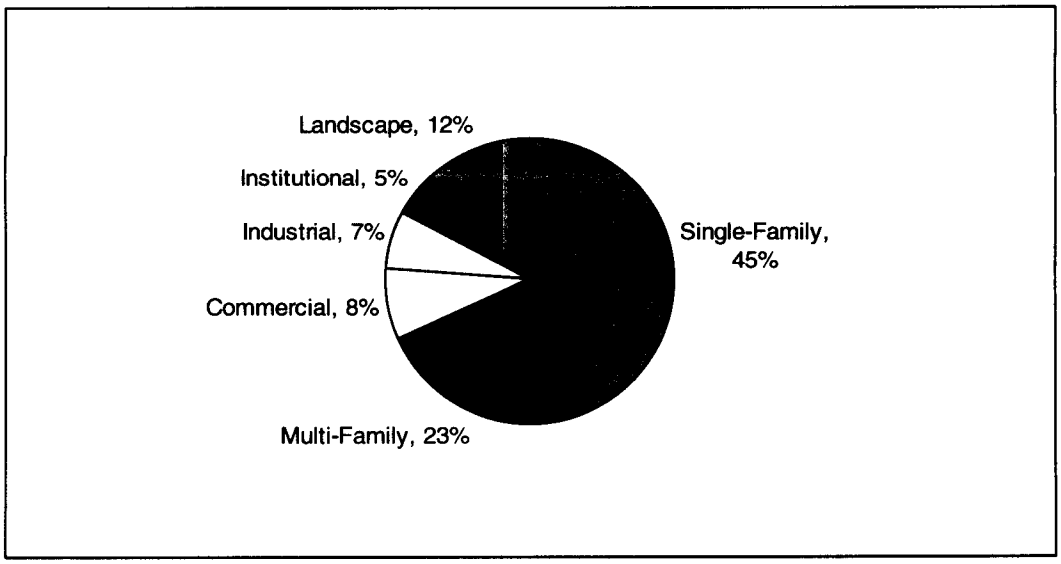
[1] The Plan has been amended to include additional information on projected water accounts and wastewater flows. The amended Plan was adopted on April 27, 2006 by the ACWD Board of Directors Resolution No. 06-030.

Table 2-2
ACWD Water Accounts by Customer Classification
(Number of Accounts)

Water Use Category	*Historical (Fiscal Year)*						*Projected*			
	99-00	*00-01*	*01-02*	*02-03*	*03-04*	*04-05*	*2010*	*2015*	*2020*	*2025*
Single Family Residential	67,061	67,820	68,365	68,623	68,805	68,994	72,679	74,992	75,439	75,439
Multi-Family Residential	2,012	2,013	2,016	2,017	2,017	2,020	2,265	3,226	4,832	6,306
Commercial	2,317	2,317	2,337	2,348	2,314	2,310	2,368	2,396	2,421	2,432
Industrial	667	696	718	715	716	726	767	862	903	939
Institutional	429	431	439	446	447	448	456	467	472	476
Landscape	1,649	1,704	1,773	1,804	1,816	1,833	1,915	2,172	2,543	2,882
Other	1,648	1,722	1,789	1,795	1,792	1,823	1,947	2,338	2,941	3,489
Grand Total	**75,783**	**76,703**	**77,437**	**77,748**	**77,907**	**78,154**	**82,396**	**86,453**	**89,551**	**91,963**

Notes:
1. Number of historical accounts represents accounts at mid-point of fiscal year.
2. Multi-Family Residential, Commercial, Industrial, and Institutional categories do not include dedicated landscape irrigation accounts within these categories
3. Landscape includes all dedicated landscape accounts for Multi-Family Residential, Commercial, Industrial and Institutional customers.
4. Other accounts include fire lines and hydrant meters.
5. Assumptions for projected future accounts are include: (a) current ratio of equivalent 2" meter per acre of development for non-residential use; (b) current ratio of landscape to non-landscape accounts for Multi-Family Residential, Commercial, Industrial and Institutional customers; (c) one account per 1.25 residential dwelling units forecast; and (d) current ratio of Other accounts to sum of Multi-Family Residential, Commercial and Industrial accounts.

Figure 2-1
Relative Water Consumption by Customer Classification, FY04/05



A portion of the USD's effluent is diverted from the EBDA pipeline to supply fresh water to the Hayward Marsh, a constructed wetland located just north of the San Mateo Bridge. In 1991, USD assumed responsibility for the Hayward Marsh Project. Located just north of the San Mateo Bridge, the marsh consists of 145 acres of fresh and brackish wetland, with wide-ranging environmental benefits. Before the marsh was restored from abandoned salt ponds, there was no wildlife habitat at the site. Now the marsh is a popular stop for migratory waterfowl and includes a preserve for the endangered Salt Marsh Harvest Mouse. High quality treated effluent supplied by USD is the fresh water source for this marsh ecosystem.

Existing and Projected Dry Weather Flows

The current average dry weather flows treated at the Alvarado WWTP is approximately 29 mgd. As part of its 1993 District-Wide Master Plan, USD developed dry weather flow projections of 31.8 mgd, 33.1mgd, 34.3 mgd and 35.6 mgd for the years 2010, 2015, 2020 and 2025, respectively. These dry weather flow projections were based on a review of existing and planned growth in the service area (based on the cities' General Plans) and were used for the sizing and phasing of future planned wastewater conveyance and treatment facilities.

6.3 CURRENT USES OF RECYCLED WATER

As described above, as part of USD's effluent disposal program, a portion of USD's effluent is provided to the Hayward Marsh Project (located within the ACWD service area) as a fresh water source for the marsh ecosystem. Approximately 3.5 mgd (approximately 3,900 AF/Yr) of high quality, treated effluent are provided to the marsh annually from USD's Alvarado WWTP. However, currently there are no uses of recycled water in the ACWD service area that are off-setting potable water demands. ACWD's water supply strategy, documented in the District's 2001-2005 Urban Water Management Plan and Integrated Resources Plan (IRP), includes plans for a recycled water project in the service area by the year 2020. As described in the IRP, a brackish groundwater desalination facility was implemented prior to a recycled water project because the desalination project was determined to be more cost-effective while also providing a high-quality potable source of supply (as opposed to a non-potable recycled water supply).

6.4 FUTURE RECYCLED WATER OPPORTUNITIES

The use of recycled water to offset the distribution system demand is included as part of ACWD's long-term water supply strategy in the District's Integrated Resources Plan. Recycled water in the service area is planned solely for non-potable use, primarily for landscape irrigation and industrial use. The District is not considering the use of recycled water as a potable water supply. ACWD's IRP strategy includes a phased approach to developing a recycled water supply with the first phase providing up to 1,600 AF/Yr by the year 2020. A potential second phase providing up to an additional 1,000 AF/Yr is also considered in the District's IRP (see Chapter 8 for ACWD's planned use of recycled water in 5-year increments).

ACWD and USD have evaluated several opportunities for recycled water use as a non-potable water supply in the service area. Potential sources of recycled water include treated wastewater from either the USD Alvarado Wastewater Treatment Plant or from a satellite treatment facility located in the southern service area. Each of these opportunities is described in greater detail below.

Recycled Water Treatment at USD's Alavarado Waste Water Treatment Plant

In 1993 ACWD and USD completed a Nonpotable Recycled Water Master Plan (1993 Master Plan) for the development of a recycled water program within the ACWD/USD service area. The 1993 Master Plan identified a total non-potable recycled water demand (primarily for landscape irrigation purposes) of approximately 4,000 AF/Yr. The recycled water source would be from a new tertiary treatment facility at USD's existing Alvarado WWTP in Union City. The 1993 Master Plan recommended a three phase implementation plan which allows for the most cost-effective users (i.e. those in the northern service and

RESOLUTION NO. 06-030

OF BOARD OF DIRECTORS OF ALAMEDA COUNTY WATER DISTRICT AMENDING THE ALAMEDA COUNTY WATER DISTRICT'S 2006-2010 URBAN WATER MANAGEMENT PLAN

WHEREAS, on December 15, 2005, the Board of Directors of the Alameda County Water District adopted the 2006-2010 Urban Water Management Plan (Plan) pursuant to the provisions of the California Water Code; and

WHEREAS, the Plan was subsequently submitted for review by the California Department of Water Resources; and

WHEREAS, the Department of Water Resources has requested the inclusion of additional information in the Plan;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Alameda County Water District hereby amends the adopted 2006-2010 Urban Water Management Plan to incorporate information on the projected number of water accounts through the year 2025 and on wastewater flow projections, as attached hereto.

BE IF FURTHER RESOLVED that the Board of Directors directs that the General Manager file the Plan as amended with the California Department of Water Resources.

PASSED AND ADOPTED this 27th day of April 2006, by the following vote:

AYES: Directors Lampert, Gunther, Koller, and Weed

NOES: None

ABSENT: Director Huang

Arthur Lampert, Vice President
Board of Directors
Alameda County Water District

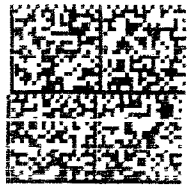
ATTEST:

Andrew Joseph
Assistant District Secretary
Alameda County Water District

APPROVED:

Ray McDevitt, Attorney
Alameda County Water District

ALAMEDA COUNTY WATER DISTRICT
43885 SOUTH GRIMMER BOULEVARD • P.O. BOX 5110
FREMONT, CALIFORNIA 94537-5110 • FAX (510) 770-1793



049J82031636
$00.630
05/05/2006
Mailed From 94538
US POSTAGE

Ms. Kim Rosmaier
California Department of Water Resources
3251 S Street
Sacramento, CA 95816

RECEIVED
MAY 8 - 2006

95816+7017-51 C028